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REMARKS

Applicant thanks the Examiner for the remarks and analysis contained in the Office Action. New claims 21-23 are added. Claims 1-23 are pending and Applicant respectfully requests reconsideration of this application.

Applicant respectfully traverses the rejection under 35 U.S.C. §102 of claims 1, 2, 3, 8, 11, 12 and 13 based upon the *Lardiere, Jr. et al.* reference. The Examiner's interpretation of that reference is inconsistent with the express teachings of that reference. The sensor element 18 does not correspond to a "resistive heating element" because there never is any current "run through it to provide heat." Nothing in the *Lardiere, Jr. et al.* reference teaches heating the sensor element 18 by applying current to it. Instead, that reference teaches a separate heater 20 that is energized to heat the sensor element 18. *Lardiere, Jr. et al.* never teach using current flowing through the sensor element 18 for the purposes of generating heat. There is no anticipation.

Additionally, the *Lardiere, Jr. et al.* reference never teaches that the sensor element 18 is laminated to the surface 22. In fact, it teaches that an insulating layer 30 is provided between the sensor element 18, heater 20 and the surface 22. There is no lamination taught anywhere in the *Lardiere, Jr. et al.* reference.

Applicant respectfully traverses the rejection under 35 U.S.C. §103 of claims 4, 5, 14 and 15 based upon *Lardiere, Jr. et al.* As discussed above, there is no anticipation of any of the claims. It follows that even if *Lardiere, Jr. et al.* could be modified as suggested by the Examiner in paragraph 4 of the Office Action, the result would not be the same as the claimed invention and, therefore, the claims cannot be considered

obvious. Moreover, there is no legal motivation to add detection leads at spaced intervals in the *Lardiere, Jr. et al.* reference. That would not provide any benefit to the small-sized sensor of that reference. Without any benefit, there is no motivation for making the change and no *prima facie* case of obviousness.

Applicant respectfully traverses the rejection of claims 6 and 16 under 35 U.S.C. §103 based upon the proposed combination of *Lardiere, Jr. et al.* and *Rutherford, et al.* There is no motivation for making that combination. The suggestion made by the Examiner is contrary to the teachings of the *Lardiere, Jr. et al.* reference. At the end of column 6 and the beginning of column 7, *Lardiere, Jr. et al.* teaches that the first surface 14 of the substrate 12 is preferably kept "as smooth as possible." If one were to make the substitution suggested by the Examiner for the purpose of having "a monolithic structure that is able to be shaped or layered to form different thicknesses in different areas," then the express intent of the *Lardiere, Jr. et al.* reference would be lost. There is no benefit to adding a different thickness arrangement as taught by *Rutherford, et al.* to the *Lardiere, Jr. et al.* reference and, therefore, there is no *prima facie* case of obviousness.

Applicant respectfully traverses the rejection of claims 7, 9, 10, 17, 19 and 20 under 35 U.S.C. §103 based upon the proposed combination of *Lardiere, Jr. et al.* with *Schellhase, et al.* The proposed combination would not result in the claimed invention because *Lardiere, Jr. et al.* does not teach that the sensor 18 is laminated to a surface 22 or 16. Nothing in *Lardiere, Jr. et al.* or *Schellhase, et al.* is fairly interpreted as teaching determining if a portion of a heater element has become separated from a surface. Therefore, even if the combination could be made, it will not result in the claimed arrangement.

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Further, there is no motivation for making the proposed combination because it provides no benefit. The sensor element 18 in the *Lardiere, Jr. et al.* reference is not attached to the surface 22 in any fashion. As noted above, an insulating layer 30 is provided between the heater 20 and the surface 22. The heater 20 is between the substrate 12 and the sensor element 18. Therefore, there is no benefit to trying to detect whether the sensor element becomes separated form the surface 22 when it is never connected to it in the first place.

This case is in condition for allowance. If the Examiner believes that a telephone conference will facilitate moving this case forward to being issued, Applicant's representative will be happy to discuss any issues regarding this application and can be contacted at the telephone number indicated below.

Applicant believes that additional fees in the amount of $54.00 are required for three claims in excess of twenty. The Commissioner is authorized to charge Deposit Account No. 50-1482 in the name of Carlson, Gaskey & Olds in the amount of $54.00. The Commissioner is authorized to charge Deposit Account No. 50-1482 in the name of Carlson, Gaskey & Olds for any additional fees or credit the account for any overpayment.

Respectfully submitted,

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CERTIFICATE OF FACSIMILE

I hereby certify that this correspondence (Application No. 10/607,022) is being facsimile transmitted to the Patent and Trademark Office (Fax No. (703) 872-9306) on November 29, 2004.

Theresa M. Palmateer

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